REMARKS

        This is in response to the final Office Action mailed March 10, 2010, in which claims 1-22 were pending. Claims 1-4, 15-18, 21 and 22 were rejected as anticipated by Zeng et al. (U.S. Pat. No. 6,236,757, hereafter "Zeng") and claim 5 was rejected as obvious over Zeng. Claims 6-14, 19 and 20 were indicated to define patentable subject matter. With this amendment, the limitation of claim 6 is added to each of independent claims 1 and 15-18 together with further clarifying language, and claim 6 is canceled. All of claims 1-5 and 7-22 are in condition for allowance, and reconsideration and notice to that effect is respectfully requested.

        Claims 1-5, 15-18, 21 and 22 were rejected over Zeng. With regard to claim 6, however, the Office Action stated, "Claims 6-14 and 19-20 [are] objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims." Claim 6 originally stated, "Encoding method according to claim 1 wherein the method comprises, for each of said zones, the application to said mesh, of coefficients of said type of wavelets assigned to said zone, taking account of a scalar value associated with said mesh at an updating point of said zone and said scalar value associated with said mesh at certain points at least, neighboring said updating point." With this amendment, the claim 6 limitation directed to, for each of the zones, application to the mesh of coefficients "<u>taking account of a scalar value associated with said mesh at an updating point of said zone and said scalar value associated with said mesh at certain points at least, neighboring said updating point</u>," is added to claim 1 and all the other independent claims. Entry of this amendment to place the application in condition for allowance is respectfully requested. All the present claims are patentable for the same reasons that claim 6 was previously indicated patentable, among others.

        Moreover, Zeng is not relevant to the invention as presently claimed. Zeng discloses an image coding method using image partitioning into several pixel sub-groups according to a quad tree, which is a quad tree with pixels (see col. 4, ln. 63 to col. 5, ln. 7 of Zeng). Besides, Zeng discloses an image encoding process which consists of using, for the encoding of the pixels of the image to encode and for each zone of the image to encode, a wavelet type of which the entropy of the coefficients issued from the wavelet transformation is minimized, and without analysis of the contents of the image to be encoded (see col. 4, ln. 38-50 of Zeng). That is, in Zeng the wavelet type is chosen in an empiric way by the application of a series of wavelets transform filters type. On the other hand, in the image

encoding process of the present invention, the hierarchical mesh on which the wavelet transformations are applied is obtained after preliminary analysis of the image to be encoded. The hierarchical mesh is obtained from an initial mesh (or "coarse mesh"). Elements (facets, triangles, etc.) of the initial mesh are subdivided or grouped, so the mesh is hierarchical. See the definition of hierarchical mesh at p. 7, ln. 15-17, p. 12, ln. 12-16 or p. 22, l. 7-14 of the present application. Zeng discloses image encoding using first generation wavelets. The wavelets are directly applied to the pixels of the image which is to be encoded. It is known that such first generation wavelets are applicable strictly on the basis of a regular mesh. This is why Zeng discloses their use on regular distribution of the image pixels. Contrary to Zeng, the present invention uses "second generation" wavelets, these wavelets being applied to a two or three dimensional object. See p. 1, ln. 7-11 of the present application. As a consequence, Zeng is not relevant to the present invention since the images to be encoded in Zeng are not associated with a hierarchical mesh as required in claim 1 and the other independent claims. The rejection of claims 1-5, 15-18, 21 and 22 over Zeng should be withdrawn.

The application containing pending claims 1-5 and 7-22 is in condition for allowance. Entry of this Amendment After Final, together with reconsideration and notice to that effect, is respectfully requested. The Commissioner is authorized to charge payment of any additional fees associated with this paper or credit any overpayment to Deposit Account No. 50-2998. The Examiner is invited to contact the undersigned attorney at the number listed below if such a call would in any way facilitate allowance of the application.

Respectfully submitted,

SHEWCHUK IP SERVICES, LLC

Date:____June 10, 2010_____   By _____/JDS/_____

Jeffrey D. Shewchuk, Reg. No. 37,235
SHEWCHUK IP SERVICES, LLC
3356 Sherman Ct., Ste. 102
Eagan, MN 55121
Telephone: (651) 331-9558
Fax: (651) 688-3348

JDS